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FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20541

November 30, 1995

Mr. William F. Caton, Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Re: Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of  
Microwave Relocation-- WT Docket No. 95-157

Dear Mr. Caton:

The National Rural Electric Cooperative Association (NRECA) hereby submits its comments regarding the Federal Communications Commission's Notice of Proposed Rulemaking Rulemaking, FCC 95-426, adopted October 12, 1995, and released October 13, 1995 (WT Docket No. 95-157).

Enclosed are an original plus nine copies of NRECA's comments. Please provide a personal copy to each of the Commissioners.

Sincerely,

Ronald K. Greenhalgh  
Chief Engineer

RKG/kh

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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In the Matter of )  
Amendment to the Commission's Rules ) WT Docket No. 95-157  
Regarding a Plan for Sharing ) RM-8643  
the Costs of Microwave Relocation )

DOCKET FILE COPY ORIGINAL

To: The Commission

COMMENTS OF THE  
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Pursuant to Section 1.415 and 1.419 of the Federal Communication Commission's (FCC) Rules, the National Rural Electric Cooperative Association (NRECA) hereby submits its comments on the Notice of Proposed Rulemaking, FCC 95-426, adopted October 12, 1995 and released October 13, 1995, in the above-captioned proceeding in which the FCC proposes to adopt a plan for sharing the costs of relocating microwave facilities currently operating in the 1850 to 1990 MHZ ("2 GHz") band, which has been allocated for use by broadband Personal Communications Services ("PCS").

**I. Introduction**

The National Rural Electric Cooperative Association (NRECA) is the national association of more than 1,000 consumer-owned rural electric generation & transmission and distribution systems which supply central station electricity to more than 30 million people in the rural areas of 2600 counties in 46 states. Rural electric cooperatives serve some 75% of the land area and operate about half of all of the miles of electric lines in the United States, providing services to the farthest reaches of our nation. Rural electric systems average 5 consumers per mile of line, compared with an average of 35 consumers per mile of line for other utilities.

The frequencies assigned to electric utilities in the 1850-2200 MHZ band are used for the essential purposes of monitoring and controlling the flow of electric power, communicating in times of natural disaster, and detecting, isolating and solving problems before they result in a major disruption of electric service. The following NRECA member systems have existing frequency assignments in that band:

Alabama Electric Cooperative, Inc.  
Altamaha Electric Membership Corp.  
Arizona Electric Power Cooperative, Inc.

Basin Electric Power Cooperative  
Berkeley Electric Cooperative, Inc.  
Big Rivers Electric Corporation  
Blue Ridge Electric Cooperative, Inc.  
Blue Ridge Membership Corporation  
Blue Bonnet Electric Cooperative  
Brazos Electric Power Cooperative, Inc.  
Cajun Electric Power Cooperative, Inc.  
Carroll Electric Cooperative Corp.  
Central Electric Power Cooperative  
Central Iowa Power Cooperative  
Chugach Electric Association, Inc.  
Colquitt Electric Membership Corporation  
Cooperative Power Association  
Corn Belt Power Cooperative  
Cuivre River Electric Cooperative, Inc.  
Cumberland Electric Membership Corp.  
Dairyland Power Cooperative  
Deseret Generation & Transmission Cooperative  
Dixie Electric Membership Corporation  
East Central Electric Association  
East Kentucky Power Cooperative, Inc.  
East River Electric Power Cooperative, Inc.  
Empire Electric Association, Inc.  
Federated Rural Electric Association  
Flint Electric Membership Corp.  
Four County Electric Membership Corp.  
Gibson County Electric Membership Corp.  
Golden Valley Electric Association, Inc.  
Green River Electric Corporation  
Guadalupe Valley Electric Cooperative  
Hart County Electric Membership Corp.  
Henderson-Union Rural Electric Cooperative Corp.  
Hoosier Energy Rural Electric Cooperative, Inc.  
Intermountain Rural Electric Association  
Jackson Electric Membership Corp.  
Jasper Newton Electric Cooperative, Inc.  
Jefferson Electric Membership Corp.  
Johnson County Electric Cooperative Association  
KAMO Electric Cooperative, Inc.  
Lake Region Electric Cooperative, Inc.  
Lea County Electric Cooperative, Inc.  
Lower Colorado River Authority

Medina Electric Cooperative, Inc.  
Minnkota Power Cooperative, Inc.  
Mitchell Electric Membership Corporation  
Moon Lake Electric Association, Inc.  
Navopache Electric Cooperative, Inc.  
North Arkansas Electric Cooperative, Inc.  
North Georgia Electric Membership Corp.  
Northwest Electric Power Cooperative, Inc.  
Northwest Iowa Power Cooperative  
Owen County Rural Electric Cooperative Corp.  
Palmetto Electric Cooperative, Inc.  
Petit Jean Electric Cooperative Corp.  
Plains Electric Generation & Transmission Cooperative, Inc.  
Platte Clay Electric Cooperative, Inc.  
Plumas Sierra Rural Electric Cooperative  
Rappahannock Electric Cooperative  
Rayle Electric Membership Corporation  
Runestone Electric Association  
Rushmore Electric Power Cooperative  
Sam Houston Electric Cooperative, Inc.  
San Bernard Electric Cooperative, Inc.  
Satilla Rural Electric Membership Corp.  
Sho-Me Power Corporation  
South Mississippi Electric Power Association  
South Texas Electric Cooperative  
Southern Illinois Power Cooperative  
Southern Maryland Electric Cooperative, Inc.  
Southside Electric Cooperative  
Southwest Tennessee Electric Membership Corp.  
Sumter Electric Cooperative, Inc.  
Sunflower Electric Cooperative, Inc.  
Talquin Electric Cooperative, Inc.  
Tri State Generation and Transmission Association, Inc.  
Union Rural Electric Cooperative, Inc.  
United Power Association  
Valley Electric Association, Inc.  
Warren Rural Electric Cooperative Corp.  
Western Farmers Electric Cooperative

Each of these NRECA member systems will suffer hardships, in varying amounts, if they are forced to move, without compensation, from this band to less reliable media. The lost spectrum would have to be replaced because operating electrical transmission and distribution systems at reduced reliability is not an option. Reduced reliability from other data and voice

transmission media or leased circuits, lack of suitable frequencies in other private microwave bands, and the expense involved in replacing microwave systems with fiber optic systems or switching to higher frequency bands (where feasible), would all contribute to those hardships. The high costs are largely attributable to the fact that NRECA's member systems operate in sparsely populated areas and their facilities are widely dispersed. Common carrier services that are reliable enough for electric utility operations generally do not exist in these areas, so they would have to be constructed. Substituting fiber optic circuits for the existing frequencies in the 1850-2200 MHz band is unreasonably expensive and impractical. Hundreds of miles of redundant fiber optic installations would be required to provide the reliability necessary for electric utility operations.

## **II. NRECA Comments**

The Notice of Proposed Rulemaking FCC 95-426 (NPRM FCC 95-426) outlines the very extensive comment and deliberation period during the development of the existing relocation procedures for microwave incumbents which were adopted in the Emerging Technologies Docket 92-9. Throughout that period NRECA strongly opposed efforts to arbitrarily require rural electric cooperatives and other utilities to relinquish assigned frequencies in the 1850-2200 MHz band, unless equally reliable communications media would be made available at no additional cost. However, because the FCC accommodated many of the concerns of the rural electric utilities in the final relocation procedures adopted pursuant to Docket No. 92-9, NRECA has been a strong supporter of those procedures.

In addition, Congress has repudiated an attempt to modify the existing framework of the voluntary and mandatory negotiation periods. Since the release of the NPRM FCC 95-426 on October 13, 1995, both the United States House of Representatives and the United States Senate have approved the Conference Report on H.R. 2491, Balanced Budget Act of 1995 (H. Rept. No. 140-347). The bill was cleared for the White House on November 20, 1995. This legislative action comports well with the Commission's statement at Paragraph 3 (NPRM FCC 95-426):

We emphasize that our intent is not to reopen that proceeding [*Emerging Technologies* ET Docket 92-9] here, because we believe that the general approach to relocation in our existing rules is sound and equitable.

The recent legislative action renders moot the footnote (Note 2) to Paragraph 3 of NPRM FCC 95-426.

As general comments, NRECA applauds the development of a cost-sharing plan in order to avoid an area of potential conflict among PCS licensees, but strongly recommends against the establishment of sunset dates.

NRECA offers the following specific comments on the proposed Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation.

Paragraph 24 - Adoption of a suitable cost-sharing plan will encourage relocation of entire microwave systems rather than individual links, resulting in a more efficient and reliable overall system at a lower ultimate cost. In addition, PCS cost-sharing would remove a burden from 2 GHz incumbents if entire systems are relocated and future discussions over such things as interference occur totally within the PCS community.

Paragraph 31 - The  $T_1$  variable should be determined on date of transfer or creation of a reimbursement right in order to protect links that may not be the subject of relocation until much later, such as those in rural areas.

Paragraph 37 - The list of reimbursable costs as proposed by the FCC appears reasonable but should be illustrative and not be limited. Compensable costs in the formula should not exclude attorney, engineering or other consulting fees deemed to be necessary by the current microwave incumbents. Attorney, engineering and other consulting fees should not be excluded because smaller operations may not have the expertise on staff to help determine these new solutions. Smaller 2 GHz incumbents should not be penalized just because they do not maintain large legal or telecommunications engineering staffs.

Paragraph 43 - A cap on reimbursement costs may not be necessary. Such a cap acts as an artificial ceiling on relocation amounts paid. Such caps are not efficient in determining "prices" for future link relocation because incumbents' systems are not "cookie cutter" products but one-of-a-kind, conforming to system needs and local geography. These systems are not designed for commercial use by the public but to provide for very specific internal operational needs of rural electric systems, such as transmission switching and vital internal communications, which are significant contributors to system reliability and the safety of employees and the general public. Electricity cannot be provided without them.

However, if the Commission finds that a reimbursement cap is appropriate, \$250,000 per link plus \$150,000 for towers is reasonable and adequate at 1995 prices but an escalation factor based on the Consumer Price Index should also be adopted. Also, premiums paid by PCS licensees for early or quick relocation should probably not be included in compensable costs. If premiums are excluded, the need to protect subsequent PCS licensees with a cap recedes because comparable facilities will be determined through negotiation under existing Commission guidelines.

Paragraph 46 - Creation of a separable reimbursement right for the initial PCS licensee makes sense, as long as the current incumbent keeps all rights under while the links are in operations as discussed in Paragraph 44 of NPRM FCC 95-426.

Paragraph 69 - A Commission-specified definition of “good faith” during negotiations is not necessary because, as the Commission notes at Paragraph 7, Note 9, NPRM FCC 95-426, mutually agreeable solutions can be derived between the parties at any time during the negotiation period.

Furthermore, flexibility in the definition of “comparable facilities” helps ensure good faith. Current Commission rules state that PCS licensees must provide comparable facilities, and can petition for involuntary relocation of current incumbents. Commission rules also state that incumbents have 12 months to test new facilities for comparability, and that incumbents can be moved back if facilities are not found to be comparable. Finally, the Commission’s rules strongly encourage that some mediation or other alternate dispute resolution be employed by the parties prior to a petition for involuntary relocation. The Commission has not suggested altering this basic framework and NRECA applauds the Commission’s stance in this instance.

The balance struck in the current rules is sufficient because each party operates under different limitations and has different incentives for a successful negotiation. Not least among the balanced incentives are quick entry time for PCS licensees into their markets and solid, reliable facilities in a new frequency band for current incumbents.

Finally, local, state and federal laws and regulations govern negotiations between business entities and can be used to ensure that neither party negotiating during a mandatory period will not act in good faith.

Paragraph 74 - The FCC proposal that recurring costs be limited to a single ten-year license term is reasonable. However, in order to reduce the administrative burden on the PCS licensees it may be advisable to make reimbursement for recurring costs based on a present value basis using a set interest cost such as 9 percent per year.

Paragraph 77 - There should be no accounting for the incidental benefit of improved technologies in more modern products. The FCC has determined that incumbent users of 2 GHz spectrum must abandon existing serviceable and functionally adequate equipment and systems and purchase replacement equipment at a time of great market pressure and without regard for corporate financial budgets or other regulation by state or federal bodies. Therefore, depreciation schedules should not be applied to the cost of the new equipment and systems.

Paragraph 85 - Current incumbent licensees should retain all rights under their current licenses until comparability is determined during the test period. If a current incumbent with system reliability and safety responsibilities to the public,

its employees, other regulators, and interconnected systems, finds that a new system is not comparable, current rules dictate that the relocated incumbent will be moved back to the 2 GHz band. Therefore, until comparability is determined in tests/use of a new system or relocation back to 2 GHz band occurs, all rights under the license should be retained by the current incumbent. The need for safe, reliable operation of electric transmission and distribution systems dictates such insurance. NRECA recommends that current incumbents retain their licenses and all rights under such licenses until such time as comparability is established (during or at the conclusion of the 12-month test period), and any difficulties found during test period are remedies by the PCS licensee or the original incumbent is relocated back to the 2 GHz frequency band.

Paragraph 90 - The FCC proposes that licenses of microwave incumbents that are still operating in the 1850-1990 MHz band on April 4, 2005, should be made secondary on that date. This proposal is of major concern to rural electric utilities who may not feel the impact of emerging technologies for decades. The FCC proposal appears to be predicated on the assumption that there are emerging technology providers ready to operate in every part of the nation. In reality, many sparsely populated regions will not support the economic development of PCS now or in the foreseeable future. Moreover, it is these areas that depend the most on the reliable communications paths provided by long-distance fixed microwave paths in the 2 GHz band. If the rules are not changed, a new PCS licensee in these regions would be permitted to negotiate with incumbent microwave users potentially affected by its PCS system during the first three years of each PCS license. After three years, the PCS licensee could either continue to negotiate or invoke involuntary relocation procedures. This would ensure that all incumbent microwave users, whether they are rural or urban, have a reasonable period of time to discuss voluntary relocation before being subjected to an involuntary relocation program. This period of time will act as an incentive for new technology proponents to treat incumbents fairly.

Questions of system reliability and safety directly impinging on the public and employees in the management of electricity over wires requires that occupants of links not relocated remain primary on their licenses. Further, the Commission itself states in a discussion of reimbursement rights (for the initial PCS relocater) at Paragraph 47, NPRM FCC 95-426:

...reimbursement rights would be able to co-exist with an active microwave authorization, which means that the microwave licensee would retain its right not to be interfered with as long as it continues to operate. We believe that it is important for the microwave incumbent to retain all of its rights under its original authorization until its new system is in place.



NRECA believes that the Commission's view as stated in Paragraph 47 quoted above is correct and that all rights should be retained by incumbents until relocation is successful. Such rights include the right not to be interfered with and the ability to retain co-primary status until relocation is successfully completed. Automatic conversion to secondary status on a date certain (2005) is arbitrary and endangers the ability of rural electric systems to reliably and safely manage the flow of electricity (which requires both voice and data communications for internal operations).

### **III. Conclusion**

The length of the "transition period", if any, to be adopted by the FCC was a major consideration in FCC Docket No. 92-9. Although the FCC labeled this a "transition period", the period is one of voluntary and mandatory negotiations. The use of the term "transition" connotes that a definite anticipated conclusion will be reached, *i.e.* cleared spectrum used exclusively by emerging technologies. However, in actuality, the end result may be perpetual successful coexistence among incumbent and emerging technology users because of state-of-the-art advances such as "spread spectrum." This outcome, however, depends on an open-ended process and not on an arbitrarily selected end date like April 4, 2005, when the rights of the incumbent users would automatically evaporate.

NRECA still believes that the negotiation period should allow for the introduction of new services and provide for the relocation of the incumbents without undue disruption of electric utility services. This approach provides that there should be a period for marketplace negotiations before any involuntary relocation procedures would be invoked. The goal is to let the marketplace resolve these issues, but to have an involuntary relocation program in place as a safety net to accomplish the goals of relocation should negotiations fail to meet those goals.

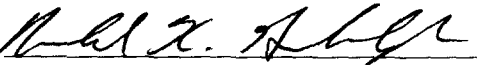
NRECA appreciates and applauds the FCC's continued sensitivity to the rights and needs of the incumbent users of the 2 GHz band. With the implementation of a few additional rules that allow and encourage voluntary negotiations on a level playing field, this proceeding could very likely continue on the "win-win" path established under Docket No. 92-9. NRECA is not opposed to personal communications systems, such as pocket-sized telephones. Many people might find these very small phones convenient and appreciate the fact that these phones permit them to send and receive calls even when they are away from their offices or homes. Additionally, the manufacture and sale of these pocket-sized phones offers the potential of developing into a major industry in the United States.

NRECA favors the development of additional amenities and conveniences for the American people and the new industries in the United States that provide them. Although pocket-sized phones and other emerging technologies may play a useful role in society and are desirable, they are not essential to the economy or to the well-being of the American people, in the same way that electricity is. NRECA strongly believes that it is unwise to require electric utilities to relocate from the highly reliable 2 GHz band in order to provide this spectrum to the

emerging technology industry. A society that compromises a basic service, like reliable electricity, is making a fundamental mistake. The FCC has demonstrated that it agrees with this philosophy and NRECA hopes it will continue its efforts to assure that this mistake is not made.

Respectfully submitted,

NATIONAL RURAL ELECTRIC  
COOPERATIVE ASSOCIATION

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